



CO.CO.MAT

CONTROL OF QUANTUM CORRELATIONS IN TAILORED MATTER
SFB/TR 21 – STUTTGART, ULM, TÜBINGEN

Kolloquium

Prof. Dr. John M. Doyle
(Harvard University)

Cold Atoms and Molecules: Science and Applications

The ability to trap and cool simple atoms has led to a revolution in atomic physics. Key achievements include Bose condensation, Fermi degeneracy, BCS/BEC crossover, single atom manipulation, atom waveguides and many more. Exploration of other atomic species and polar molecules presents new opportunities and new challenges. Examples of science opportunities include the creation of strongly interacting dipolar gases and the use of the dipole interaction for quantum information. This talk will give an overview of the motivation for studying new species and describe in detail one experimental approach, buffer-gas cooling of atoms and molecules.

Wann? Freitag, 02.06.2006, 15:30 Uhr

Wo? Universität Stuttgart, NWZ II, Raum 2.136